

Exhibit A

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

FG SRC LLC,

Plaintiff,

v.

XILINX, INC.,

Defendant.

Case No. 1:20-cv-00601-LPS

JURY TRIAL DEMANDED

PLAINTIFF'S NOTICE OF SERVICE OF SUBPOENAS DUCES TECUM

TO: Defendant Xilinx, Inc., by and through its attorneys of record, Warren K. Mabey, Jr. of Fish & Richardson P.C., located at 222 Delaware Ave., 17th Fl., Wilmington, DE 19801; David M. Hoffman of Fish & Richardson P.C., located at 111 Congress Ave., Ste. 810, Austin, TX 78701; Esha Bandyopadhyay and Bryan K. Basso of Fish & Richardson P.C., located at 500 Arguello St., Ste. 500, Redwood City, CA 94063; and Ashley A. Bolt of Fish & Richardson P.C., located at 1180 Peachtree Street NE, 21st Fl., Atlanta, GA 30309.

PLEASE TAKE NOTICE that, pursuant to Fed. R. Civ. P. 45, Plaintiff FG SRC LLC will serve the attached subpoenas duces tecum on the following entities:

- Subpoena Duces Tecum for ADTRAN, Inc.
- Subpoena Duces Tecum for AJA Video Systems, Inc.;
- Subpoena Duces Tecum for Baidu USA LLC;
- Subpoena Duces Tecum for Barco, Inc.;
- Subpoena Duces Tecum for Casa Systems, Inc.;
- Subpoena Duces Tecum for Cerebras Systems Inc.;
- Subpoena Duces Tecum for Corigine Inc.;
- Subpoena Duces Tecum for Digi-Key Corporation;
- Subpoena Duces Tecum for Echostar Corporation c/o Hughes HQ;
- Subpoena Duces Tecum for Extreme Engineering Solutions, Inc.;
- Subpoena Duces Tecum for F5, Inc.;
- Subpoena Duces Tecum for General Dynamics Corporation;

- Subpoena Duces Tecum for HGGenuine USA Co., Ltd.;
- Subpoena Duces Tecum for HiTech Global, LLC;
- Subpoena Duces Tecum for Huawei Technologies USA, Inc.;
- Subpoena Duces Tecum for Intuitive Surgical, Inc.;
- Subpoena Duces Tecum for Magna International of America, Inc.;
- Subpoena Duces Tecum for Motorola Solutions, Inc.;
- Subpoena Duces Tecum for MTI Laboratory, Inc.;
- Subpoena Duces Tecum for Napatech, Inc.;
- Subpoena Duces Tecum for Red Digital Cinema, LLC;
- Subpoena Duces Tecum for Ross Video Limited;
- Subpoena Duces Tecum for ScaleFlux, Inc.;
- Subpoena Duces Tecum for Tarana Wireless, Inc.;
- Subpoena Duces Tecum for Veoneer US, Inc.; and
- Subpoena Duces Tecum for ZT Group Int'l, Inc.

Dated: March 28, 2022

Respectfully submitted,

/s/ Paul T. Beeler

Stamatios Stamoulis (#4606)

Richard C. Weinblatt (#5080)

Two Fox Point Centre

6 Denny Road, Suite 307

Wilmington, DE 19809

Tel: (302) 999-1540

stamoulis@swdelaw.com

weinblatt@swdelaw.com

Michael W. Shore* (mshore@shorechan.com)
Alfonso Garcia Chan* (achan@shorechan.com)
Ari B. Rafilson* (arafilson@shorechan.com)
William D. Ellerman* (wellerman@shorechan.com)
Paul T. Beeler* (pbeeler@shorechan.com)
SHORE CHAN LLP
901 Main Street, Suite 3300
Dallas, Texas 75202
Telephone (214) 593-9110
Facsimile (214) 593-9111

Counsel for Plaintiff FG SRC LLC

* Admitted *pro hac vice*

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing has been served on all counsel of record via e-mail on March 28, 2022.

/s/ Paul T. Beeler

Paul T. Beeler

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: ADTRAN, Inc. at 901 Explorer Blvd., Huntsville, AL 35806
c/o Corporation Service Company, 641 South Lawrence Street, Montgomery, AL 36104*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “ADTRAN,” “You,” and “Your” mean and refer to ADTRAN, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of ADTRAN, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

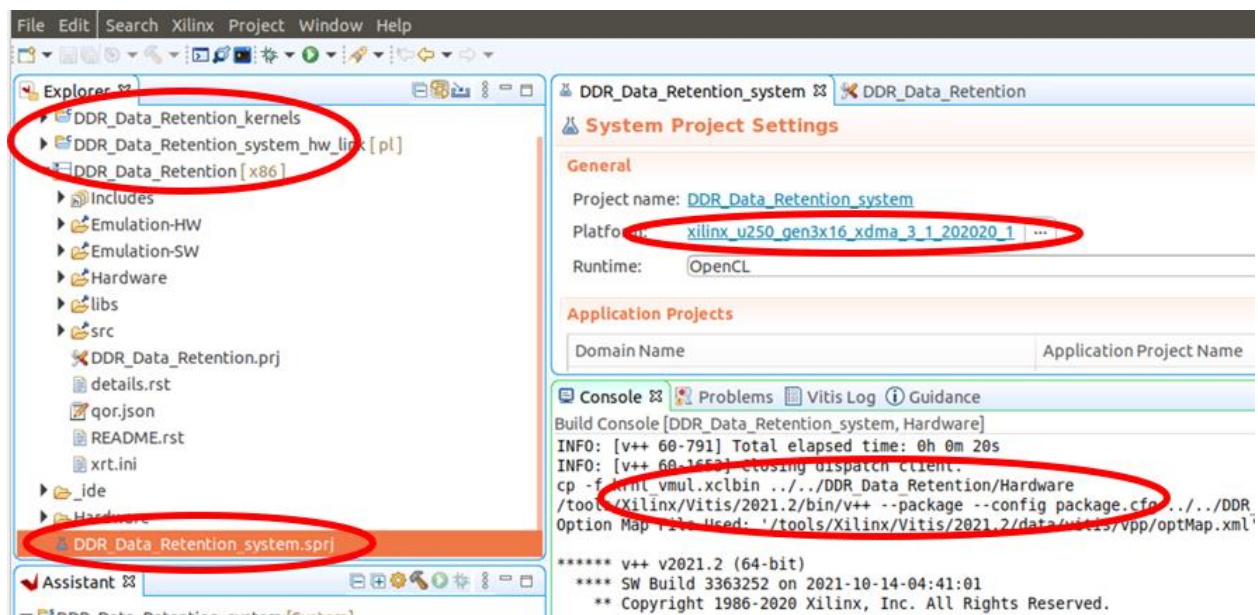
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Bain & Associates 600 Boulevard S SW, Suite 104, Huntsville, AL 35802.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: AJA Video Systems, Inc. at 180 Litton Drive, Grass Valley, CA 95945
c/o John O. Abt, 180 Litton Drive, Grass Valley, CA 95945*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “AJA Video,” “You,” and “Your” mean and refer to AJA Video Systems, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of AJA Video Systems, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

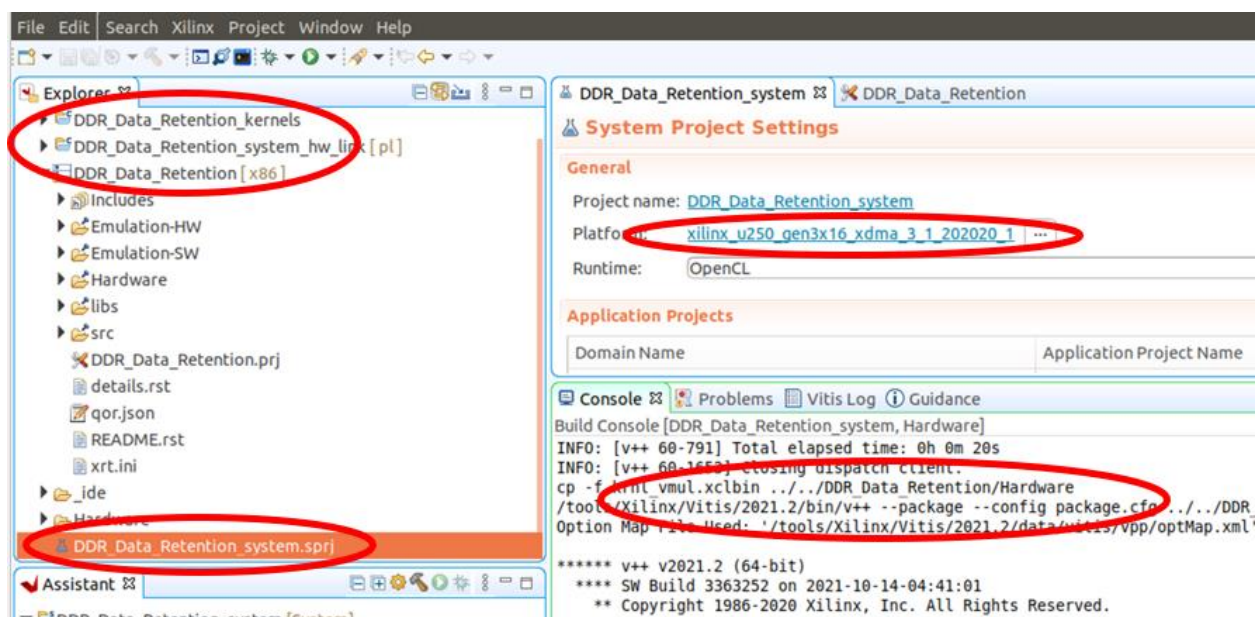
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Carol Nygard & Associates 2295 Gateway Oak Drive, Suite 170, Sacramento, CA 95833.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Baidu USA LLC at 1195 Bordeaux Drive, Sunnyvale, CA 94089
c/o Jie Zhang, 1195 Bordeaux Drive, Sunnyvale, CA 94089*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Baidu,” “You,” and “Your” mean and refer to Baidu USA LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Baidu USA LLC whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
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- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

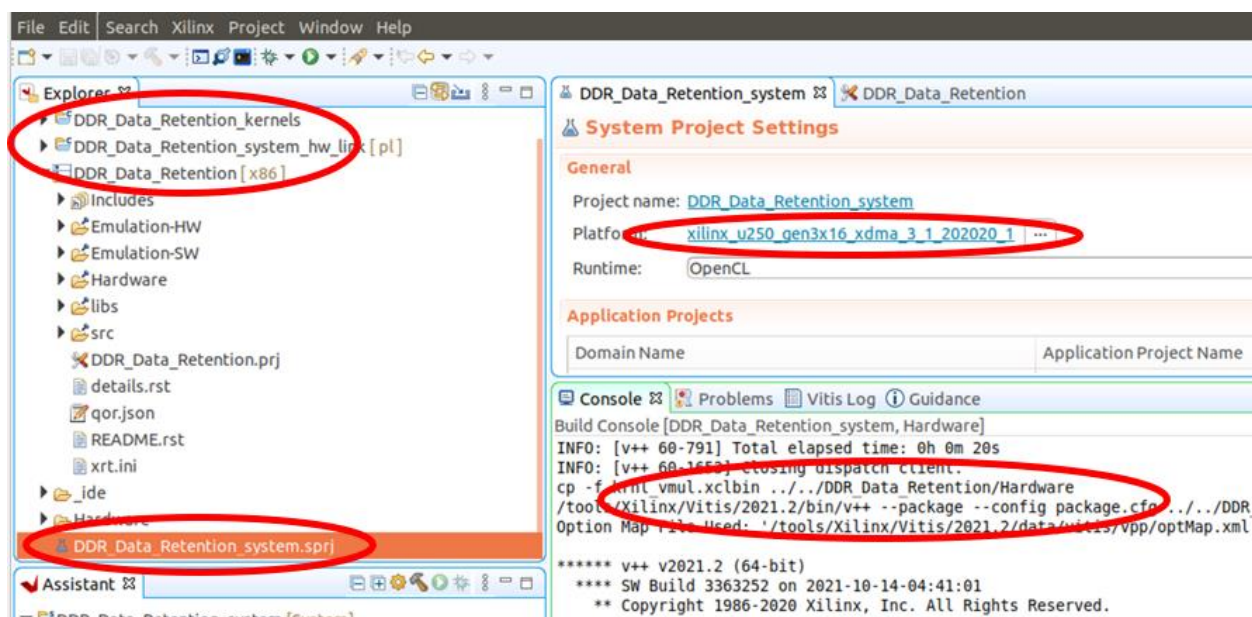
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Barco, Inc. at 2890 Zanker Road, San Jose, CA 95134
c/o Brendan Brewer, 950 Northgate Dr., Ste 202, San Rafael, CA 94903*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Barco,” “You,” and “Your” mean and refer to Barco, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Barco, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

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5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
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- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
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- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
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- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
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- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
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- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

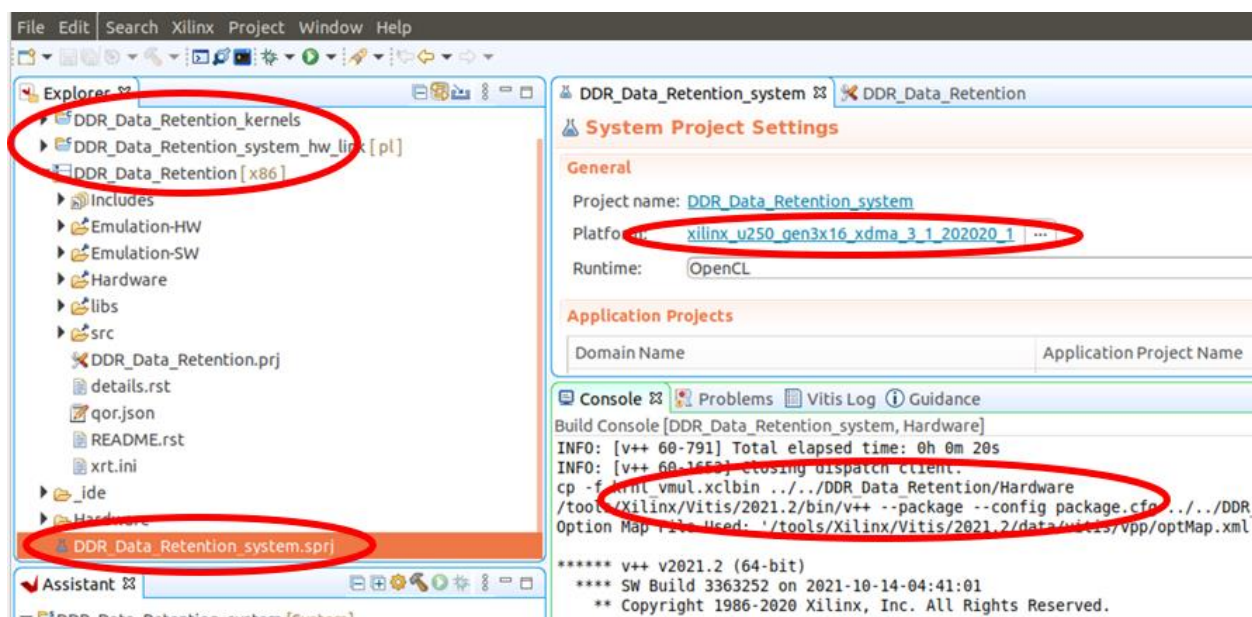
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTION

To:

Casa Systems, Inc. at 100 Old River Road, Andover, MA 01810
c/o CT Corporation System, 155 Federal Street, Ste 700, Boston, MA 02110*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Casa Systems,” “You,” and “Your” mean and refer to Casa Systems, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Casa Systems, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
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- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
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- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
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- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

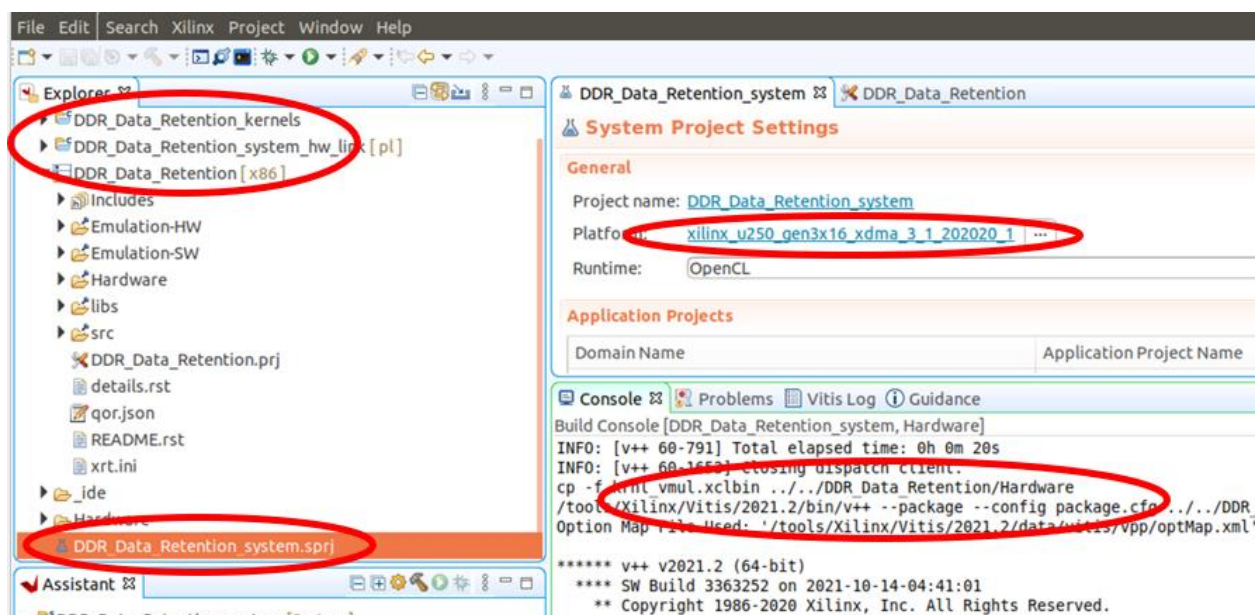
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Jones & Fuller Reporting, Inc. 10 High Street, Suite 902, Boston, MA 02110.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Cerebras Systems, Inc. at 1237 E. Arques Ave, Sunnyvale, CA 94085
c/o Andrew Feldman, 1237 E. Arques Ave, Sunnyvale, CA 94085

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Cerebras,” “You,” and “Your” mean and refer to Cerebras Systems, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Cerebras Systems, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

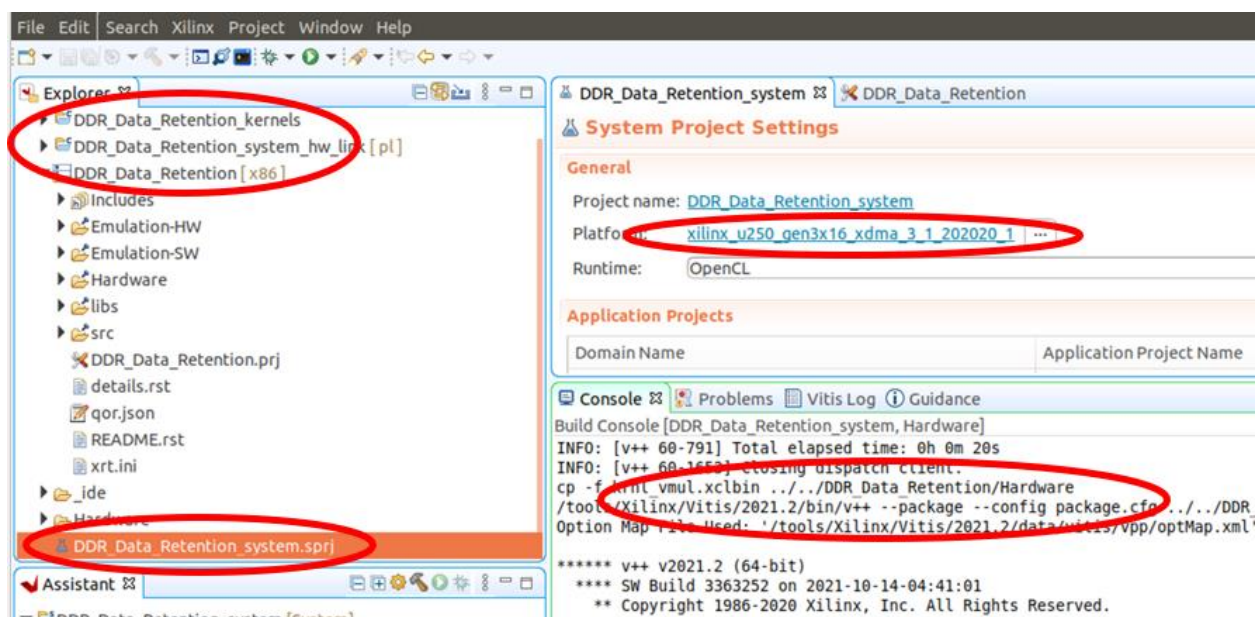
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

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2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

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5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

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7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

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9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Corigine Inc. at 4655 Old Ironsides Drive, Suite 270, Santa Clara, CA 95054
c/o Ruby Lu, 15432 Banyan Lane, Monte Sereno, CA 95030*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____
_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Corigine,” “You,” and “Your” mean and refer to Corigine, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Corigine, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

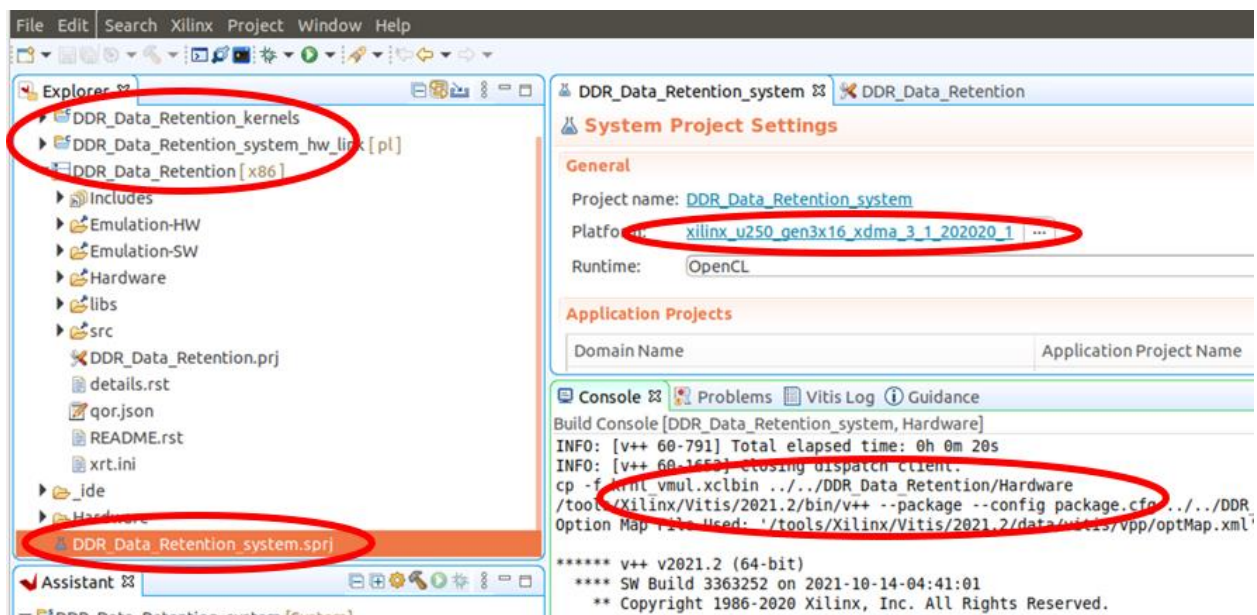
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Digi-Key Corp. at 4300 MarketPointe Drive, Bloomington, MN 55435
c/o Ronald A. Stordahl, 701 Brooks Avenue S, Thief River Falls, MN 56701*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Digi-Key,” “You,” and “Your” mean and refer to Digi-Key, Corp. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Digi-Key, Corp. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

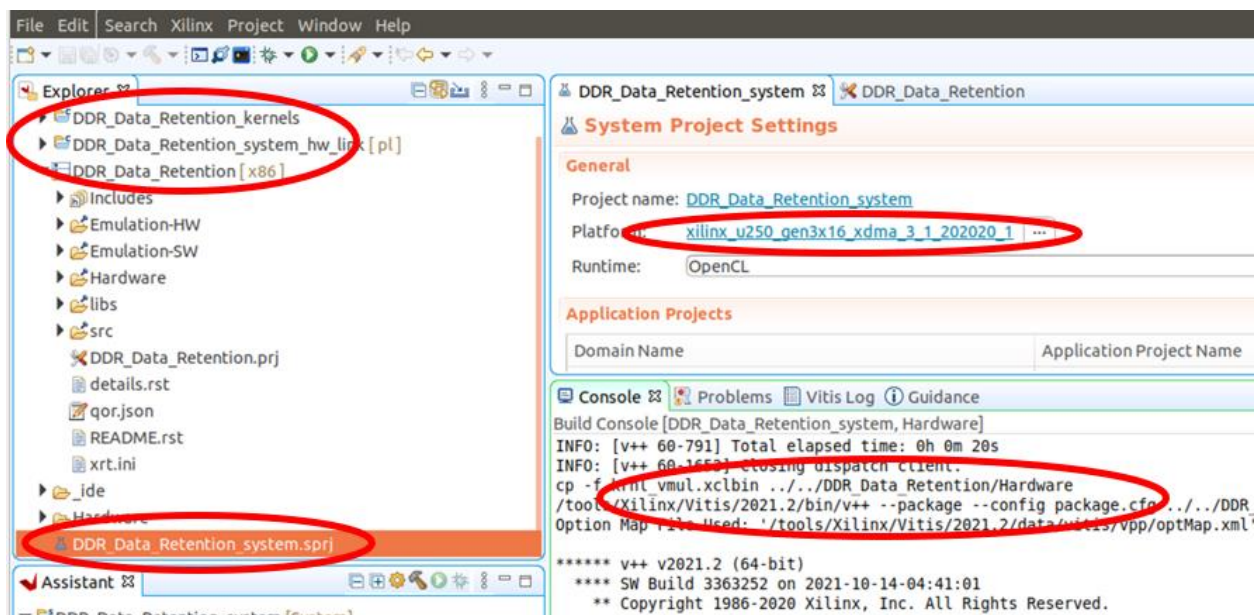
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Paradigm Reporting & Captioning Inc. - A Veritext Company, Fifth Street Towers 150 S. 5th Street, Suite 1775, Minneapolis, MN 55402.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTION

To:

EchoStar Corp. at 11717 Exploration Ln., Germantown, MD 20876
I.O.S. Group, Inc. 1013 Centre Road Ste 403-A, Wilmington, DE 19805*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “EchoStar,” “You,” and “Your” mean and refer to EchoStar Corporation and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of EchoStar Corporation, whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
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- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
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- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
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- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

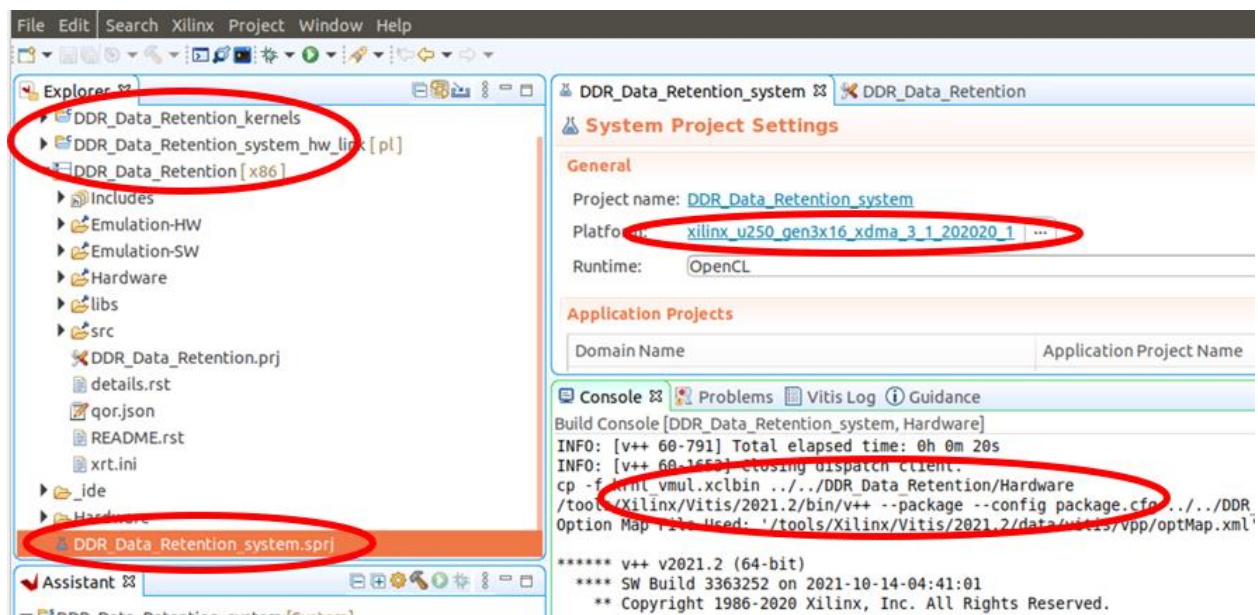
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Stamoulis & Weinblatt LLC at 800 N. West Street, Third Floor, Wilmington, DE 19801.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Extreme Engineering Solutions, Inc. at 9901 Silicon Prairie Parkway, Verona, WI 53593
c/o Robert S. Scidmore, 9901 Silicon Prairie Pkwy, Verona, WI 53593*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Extreme Engineering,” “You,” and “Your” mean and refer to Extreme Engineering Solutions, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Extreme Engineering Solutions, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced

communication, compilation, or reproduction, including computer or electronically generated or stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

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9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

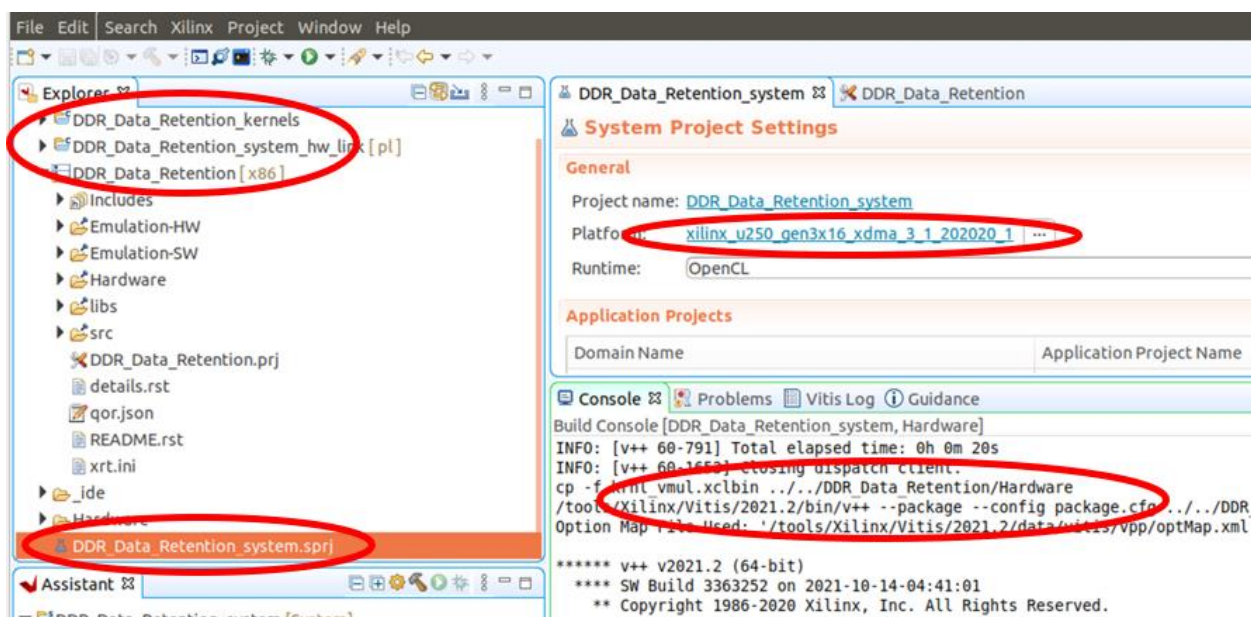
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

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13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

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II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Brown & Jones Reporting, A Veritext Company, 735 North Water Street Suite M185, Milwaukee, WI 53202.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

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6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTION

To:

F5, Inc. at 3545 N. 1st St, San Jose, CA 95134
c/o CT Corp System, 330 N. Brand Blvd, Ste 700, Glendale, CA 91203*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “F5,” “You,” and “Your” mean and refer to F5, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of F5, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

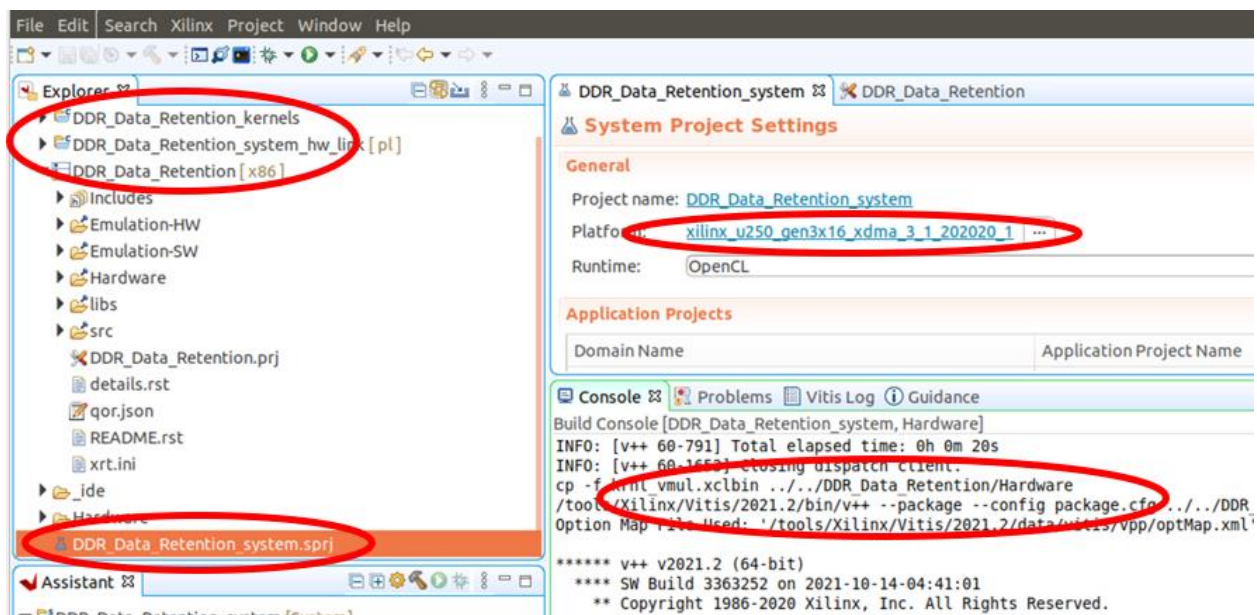
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



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DDR Data Retention

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2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

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5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

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4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: General Dynamics Corp. at 11011 Sunset Hills Road, Reston, VA 20190
c/o CT Corporation System, 4701 Cox Road, Ste 285, Glen Allen, VA 23060-6808

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “General Dynamics,” “You,” and “Your” mean and refer to General Dynamics, Corp. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of General Dynamics Corp., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

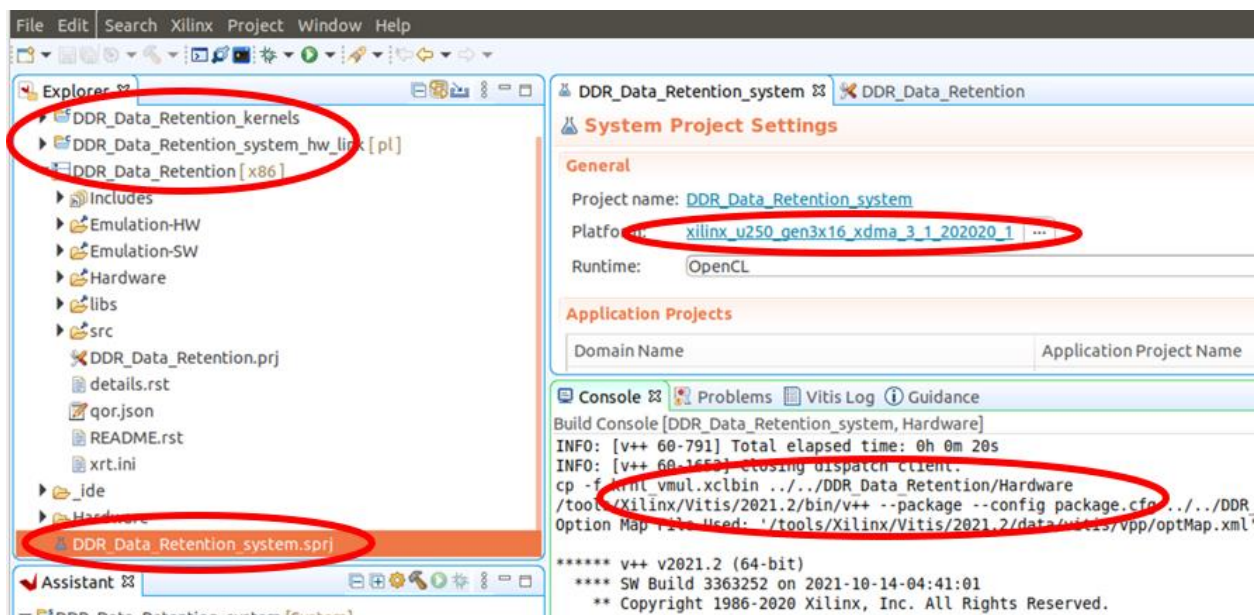
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Law Office of Thomas E. A. Bishop, 5606 Greendale Rd., Suite C, Richmond, Virginia 23228.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: HGGenuine USA Co., Ltd. at 2025 Gateway, Suite 128, San Jose, CA 95110
c/o Yibing Yang, 2025 Gateway Place, Ste 128, San Jose, CA 95110

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

*Signature of Clerk or Deputy Clerk*_____
*/s/ Paul T. Beeler*_____
Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “HGGenuine,” “You,” and “Your” mean and refer to HGGenuine USA Co., Ltd. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of HGGenuine USA Co., Ltd., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

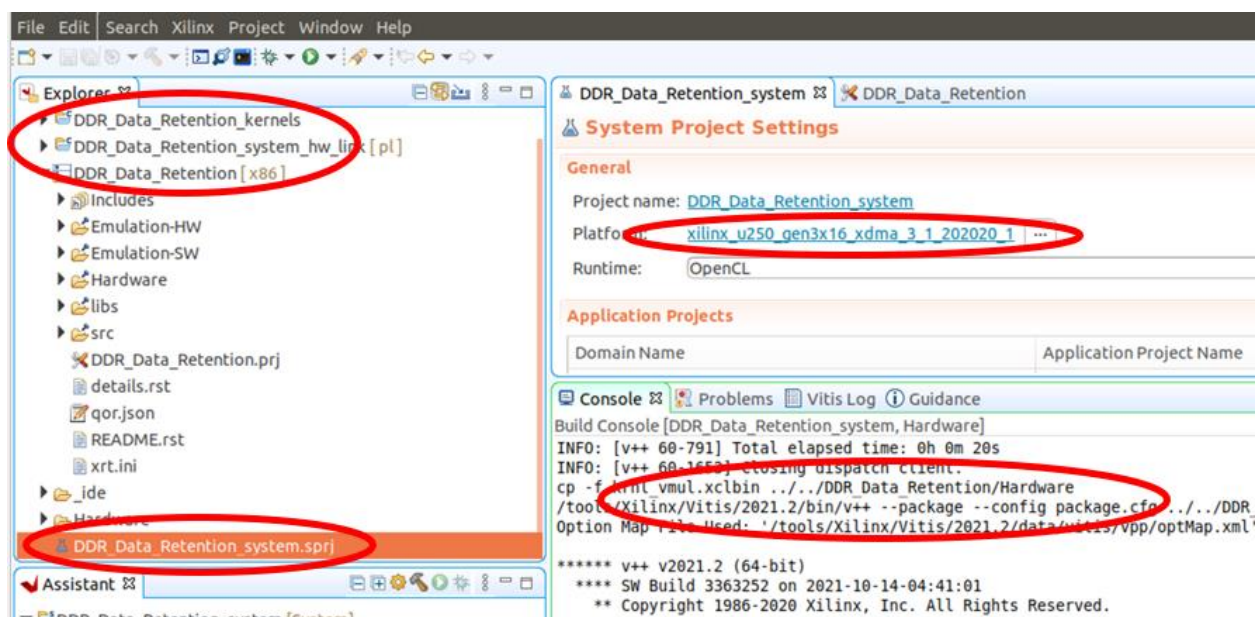
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: HiTech Global, LLC at 2059 Camden Ave. Suite # 160, San Jose, CA 95124
c/o Samantha Alimardani, 7300 Glenview Dr., San Jose, CA 95120

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
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(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “HiTech,” “You,” and “Your” mean and refer to HiTech Global, LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of HiTech Global, LLC whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
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- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

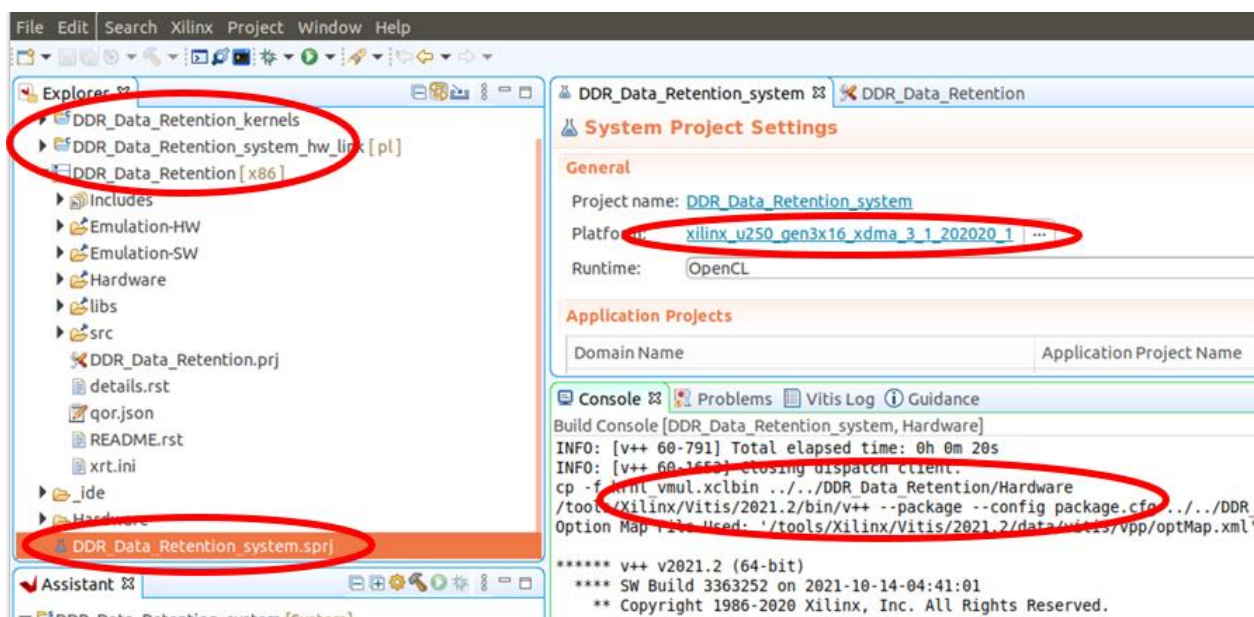
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

**SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTION**To: Huawei Technologies USA, Inc. at 16479 Dallas Parkway, Suite 355, Addison, TX 75001
c/o CT Corporation System, 1999 Bryan Street, Ste 900, Dallas, TX 75201*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Huawei,” “You,” and “Your” mean and refer to Huawei Technologies USA, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Huawei Technologies USA Inc., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

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stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

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6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

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8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

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- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
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- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

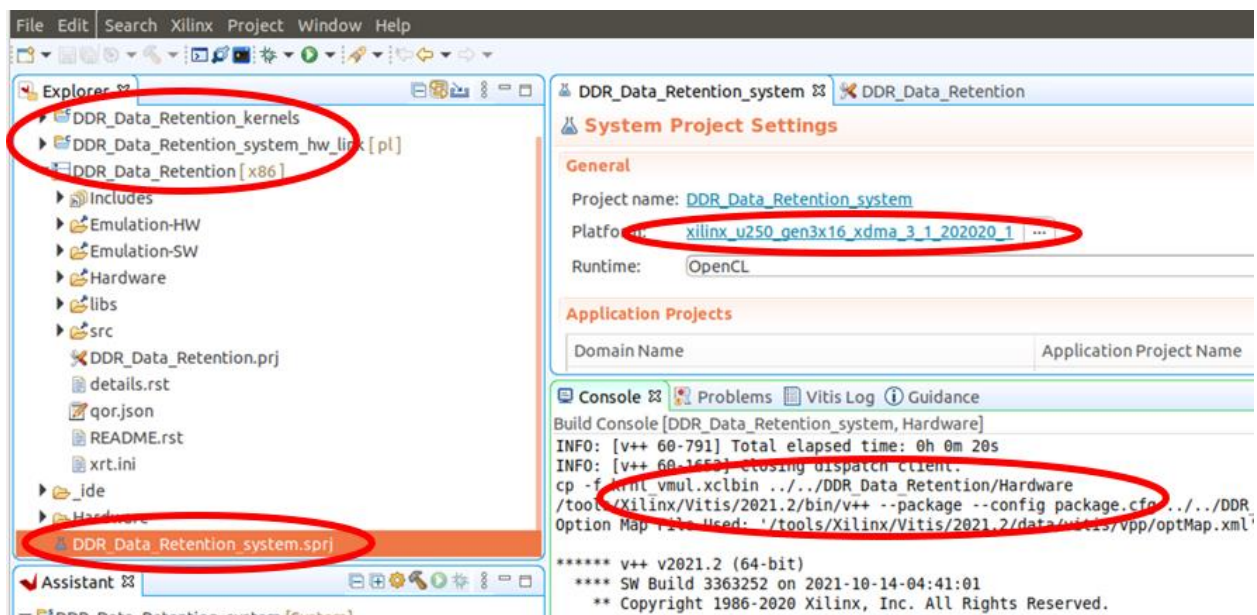
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to David K. Waggoner of Micro Title Hill County, LLC, located at 101 W. Elm Street, Hillsboro, Texas 76645.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Intuitive Surgical, Inc. at 1020 Kifer Road, Sunnyvale, CA 94086-5304
c/o CT Corp System, 330 N. Brand Blvd, Ste 700, Glendale, CA 91203

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

*Signature of Clerk or Deputy Clerk*_____
*/s/ Paul T. Beeler*_____
Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Intuitive Surgical,” “You,” and “Your” mean and refer to Intuitive Surgical, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Intuitive Surgical, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

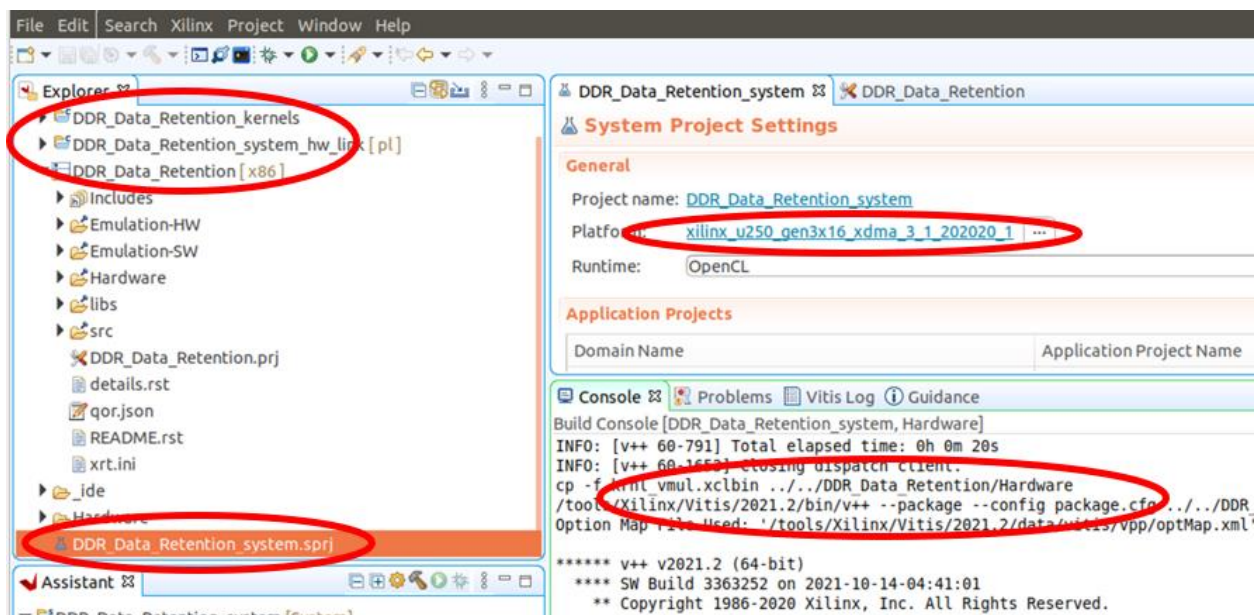
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

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12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Magna International of America, Inc.
750 Tower Dr., Troy, Michigan 48098*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Magna,” “You,” and “Your” mean and refer to Magna International of America, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Magna International of America, Inc., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced

communication, compilation, or reproduction, including computer or electronically generated or stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);

- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

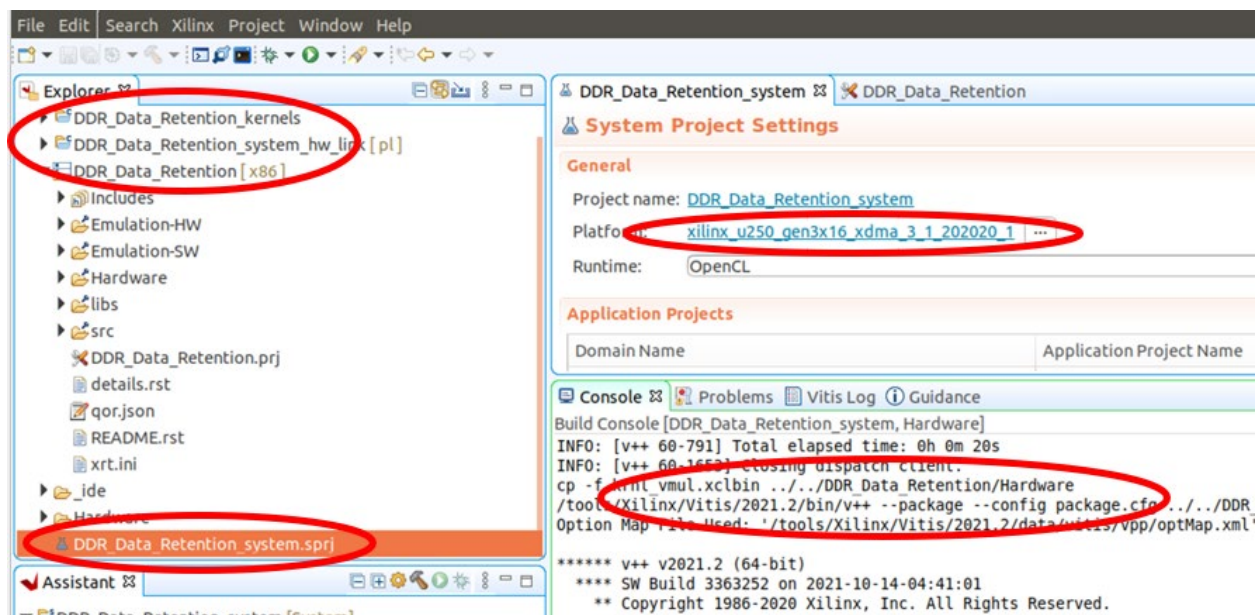
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Hanson/Renaissance Reporting Services, 400 Renaissance Center, Ste 2160, Detroit, Michigan 48243.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Motorola Solutions, Inc. at 1507 Lyndon B Johnson Fwy #700, Dallas, TX 75234
c/o CT Corporation System 1999 Bryan Street, Ste 900, Dallas, TX 75201

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

*Signature of Clerk or Deputy Clerk*_____
*/s/ Paul T. Beeler*_____
Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC
_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Motorola,” “You,” and “Your” mean and refer to Motorola Solutions, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Motorola Solutions, Inc., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

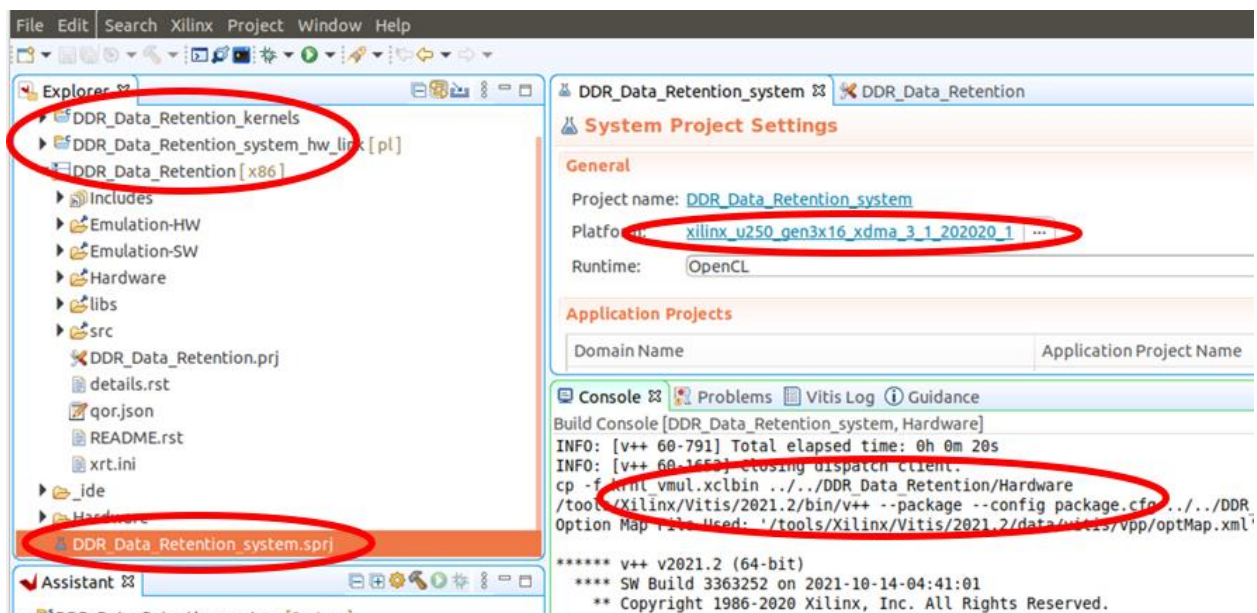
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to David K. Waggoner of Micro Title Hill County, LLC, located at 101 W. Elm Street, Hillsboro, Texas 76645.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: MTI Laboratory, Inc. at 201 Continental Blvd. Suite 300, El Segundo, CA 90245
c/o Alister Hsu, 201 Continental Blvd, Ste 300, El Segundo, CA 90245

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “MTI Laboratory,” “You,” and “Your” mean and refer to MTI Laboratory, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of MTI Laboratory, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

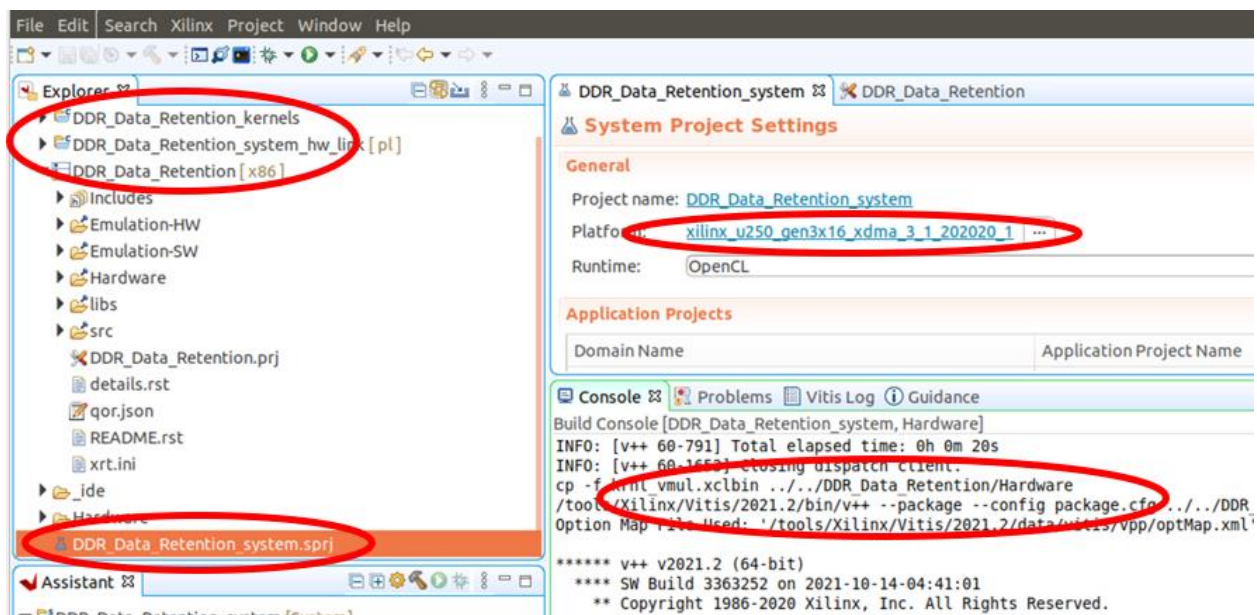
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to AdvancedOne 17752 Sky Park Cir #100, Irvine, CA 92614.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

**SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTION**To: Napatech, Inc. at 1 New Hampshire Avenue, Suite 125, Portsmouth, NH 03801
c/o Corporation Service Company, 10 Ferry Street, S313, Concord, NH 03301*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Napatech,” “You,” and “Your” mean and refer to Napatech, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Napatech, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
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- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
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- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

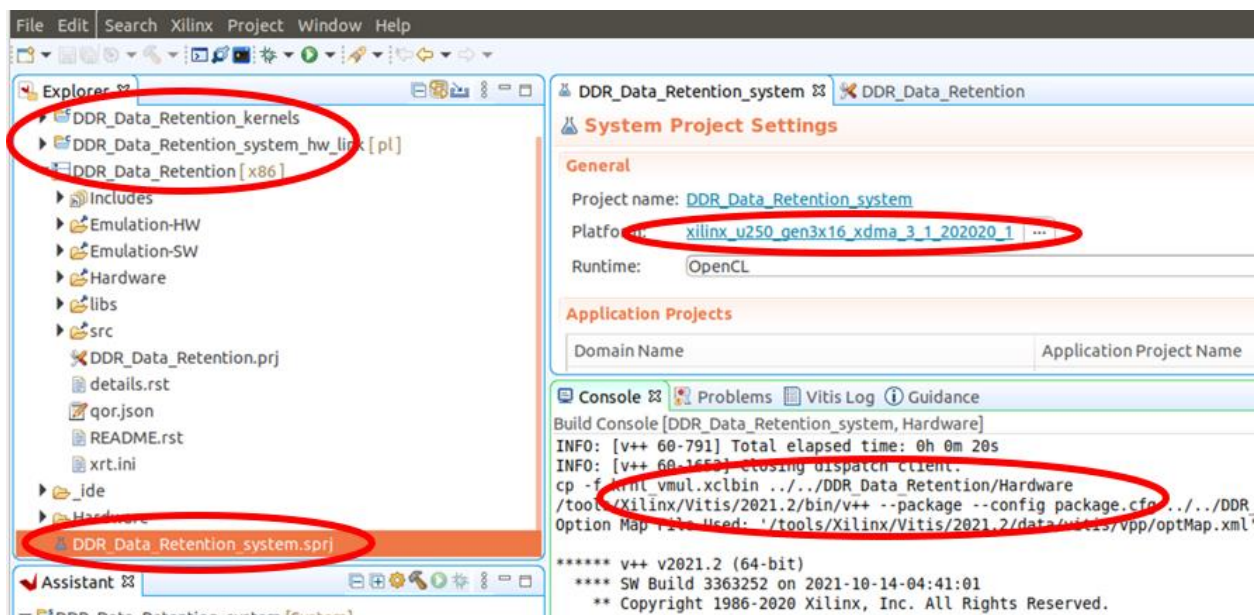
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Jones & Fuller Reporting, Inc. 10 High Street, Suite 902, Boston, MA 02110.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Red Digital Cinema, LLC at 94 Icon, Foothill Ranch, California 92610
c/o Gregory Nelson, 16236 San Dieguito Road, Ste 5-20, Rancho Santa Fe, CA 92067

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

*Signature of Clerk or Deputy Clerk*_____
*/s/ Paul T. Beeler*_____
Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Red Digital,” “You,” and “Your” mean and refer to Red Digital Cinema, LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Red Digital Cinema, LLC whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

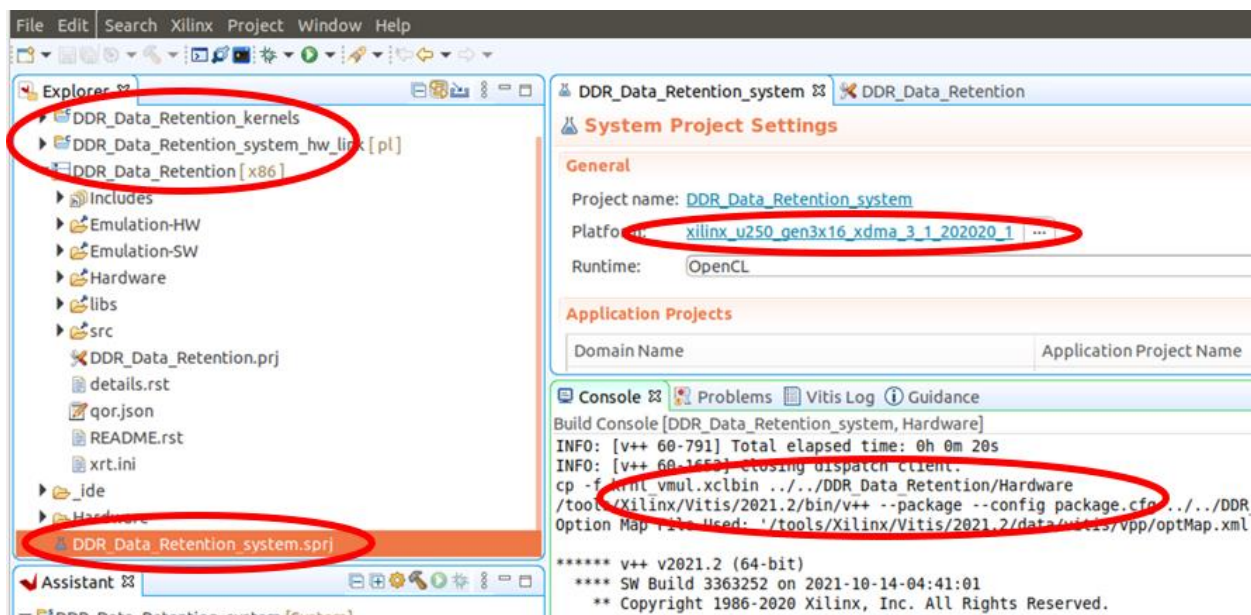
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.

DDR Data Retention

This example demonstrates how DDR can hold the data between successive XCLBIN load. The first xclbin dumps the DDR data at the end of the run. The second xclbin loads the dumped data and starts executing.

10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to AdvancedOne 17752 Sky Park Cir #100, Irvine, CA 92614.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

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1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Ross Video, Ltd. at 11370 Sunrise Park Drive, Rancho Cordova, CA 95742
c/o Registered Agents, Inc., 1401 21st Street, Ste. R, Sacramento, CA 95811

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Ross Video,” “You,” and “Your” mean and refer to Ross Video, Ltd. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Ross Video, Ltd. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

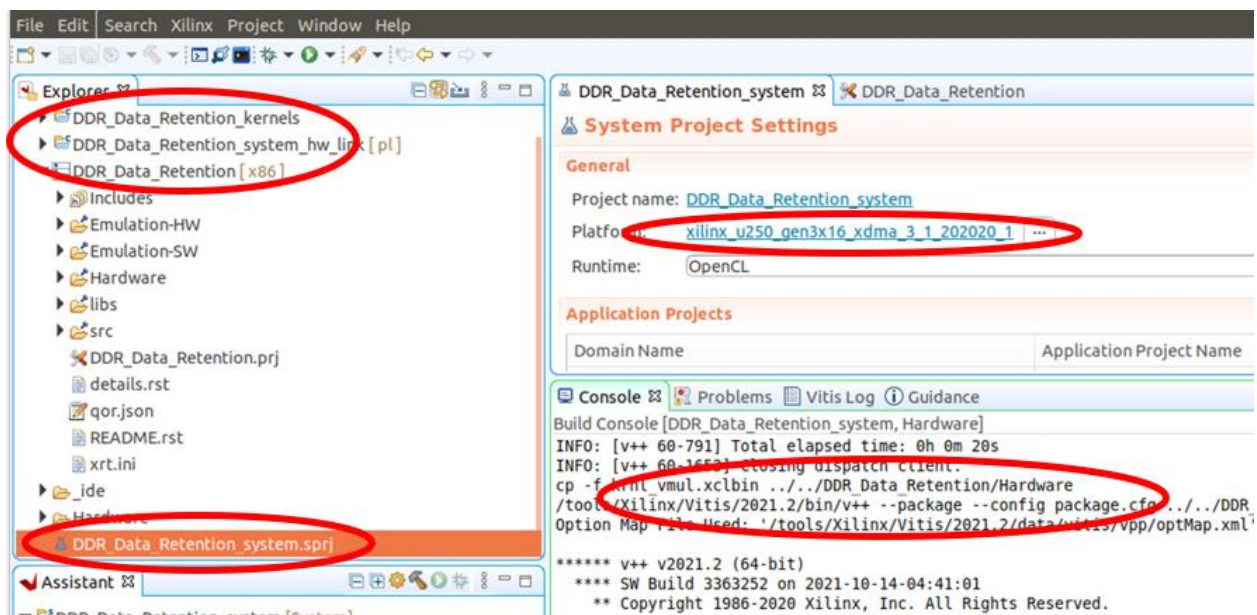
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

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2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

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7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: ScaleFlux, Inc. at 97 East Brokaw Road, Suite 260 San Jose, CA 95112
c/o Hao Zhong, 97 East Brokaw Rd, Ste 260, San Jose, CA 95112*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “ScaleFlux,” “You,” and “Your” mean and refer to ScaleFlux, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of ScaleFlux, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

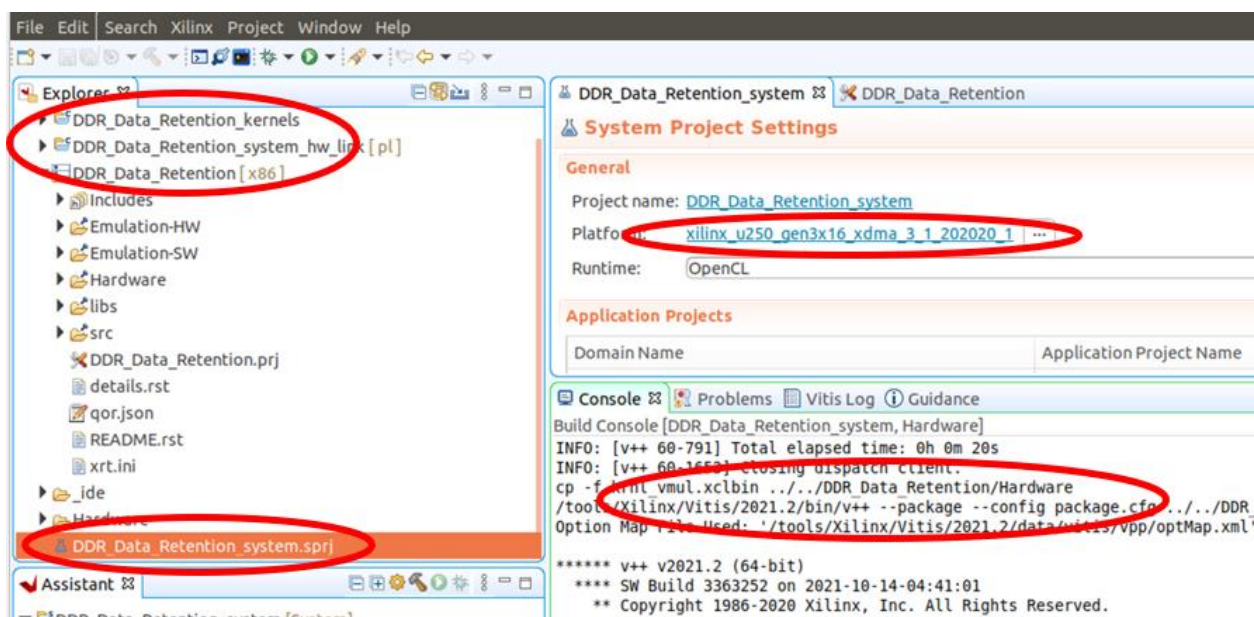
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Tarana Wireless, Inc. at 590 Alder Dr, Milpitas, CA 95035
c/o Rabin Krushnachandra Patra, 2039 Shattuck Ave., Ste 405, Berkeley, CA 94704

(Name of person to whom this subpoena is directed)

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

*Signature of Clerk or Deputy Clerk*_____
*/s/ Paul T. Beeler*_____
Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) FG SRC LLC

_____, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Tarana Wireless,” “You,” and “Your” mean and refer to Tarana Wireless, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Tarana Wireless, Inc. whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

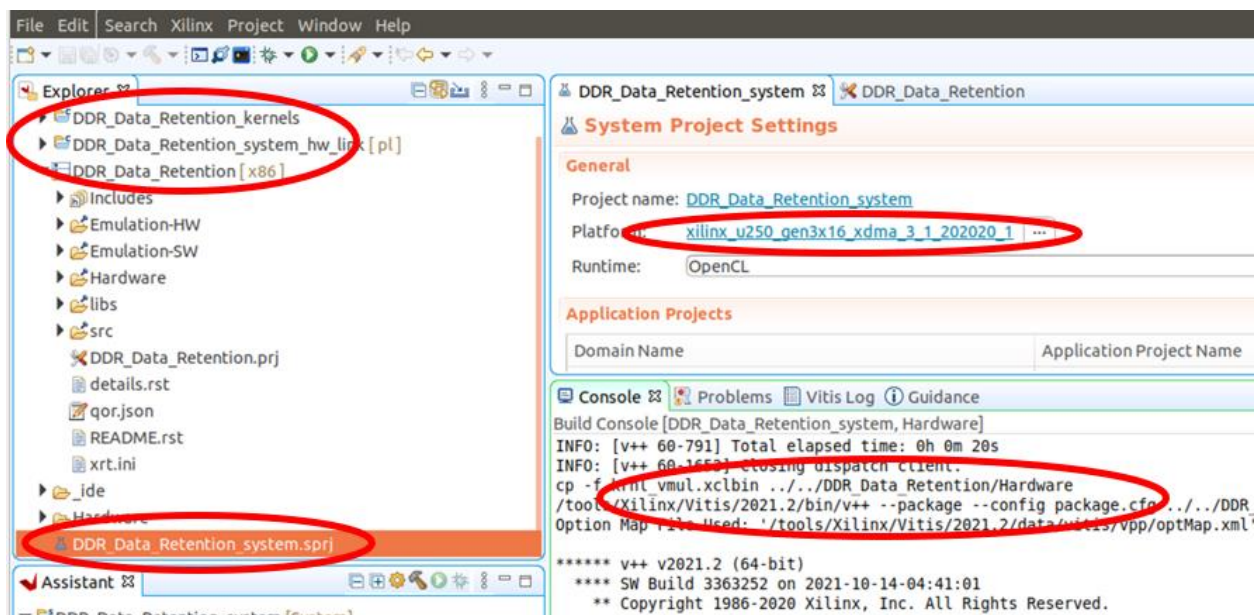
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Talty Court Reporters 2131 The Alameda, STE D, San Jose, CA 95126.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTIONTo: Veoneer US, Inc. at 26360 American Dr, Southfield, MI 48034
c/o Registered Agent Solutions, Inc. at 2285 South Michigan Road, Eaton Rapids, MI 48827*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

*Attorney's signature*The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC

, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____
_____.

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ _____ 0.00 _____.

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “Veoneer,” “You,” and “Your” mean and refer to Veoneer US, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Veoneer US, Inc., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
- Artix UltraScale+ FPGA devices (including but not limited to the AU10P, AU15P, AU20P, and AU25P products);
- Kintex UltraScale+ Evaluation Kits (including but not limited to the KCU116 product);
- Kintex UltraScale+ FPGA devices (including but not limited to the KU3P, KU5P, KU9P, KU11P, KU13P, KU15P, and KU19P products);
- Kintex UltraScale Evaluation Kits (including but not limited to the KCU105 product);
- Kintex UltraScale FPGA devices (including but not limited to the KU025, KU035, KU040, KU060, KU085, KU095, and KU115 products);
- Virtex UltraScale+ Evaluation Kits (including but not limited to the VCU118 product);
- Virtex UltraScale+ FPGA devices (including but not limited to the VU3P, VU5P, VU7P, VU9P, VU11P, VU13P, VU19P, VU23P, VU27P, VU29P, VU31P, VU33P, VU35P, VU37P, VU45P, VU47P, and VU57P products);
- Virtex UltraScale Evaluation Kits (including but not limited to the VCU108 product);
- Virtex UltraScale FPGA devices (including but not limited to the XCVU065, XCVU080, XCVU095, VCVU125, XCVU160, XCVU190, and XCVU440 products);
- Zynq UltraScale+ Evaluation Kits and Characterization Kits (including but not limited to the ZCU102, ZCU104, ZCU106, ZCU111, ZCU208, and ZCU216 products);
- Zynq UltraScale+ MPSoC: CG devices (including but not limited to the ZU1CG, ZU2CG, ZU3CG, ZU4CG, ZU5CG, ZU6CG, ZU7CG, and ZU9CG products);
- Zynq UltraScale+ MPSoC: EG devices (including but not limited to the ZU1EG, ZU2EG, ZU3EG, ZU4EG, ZU5EG, ZU6EG, ZU7EG, ZU9EG, ZU11EG, ZU15EG, ZU17EG, and ZU19EG products);
- Zynq UltraScale+ MPSoC: EV devices (including but not limited to the ZU4EV, ZU5EV, and ZU7EV products);

- Automotive (XA) Zynq UltraScale+ MPSoC: EG devices (including but not limited to the XAZU2EG, XAZY3EG, and XAZU11EG products);
- Automotive (XA) Zynq UltraScale+ MPSoC: EV devices (including but not limited to the XAZU4EV, XAZU5EV, and XAZU7EV products); and
- Zynq Ultrascale+ RFSoc devices (including but not limited to the ZU21DR, ZU25DR, ZU27DR, ZU28DR, ZU29DR, ZU39DR, ZU42DR, ZU43DR, ZU46DR, ZU47DR, ZU48DR, and ZU49DR products).

9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

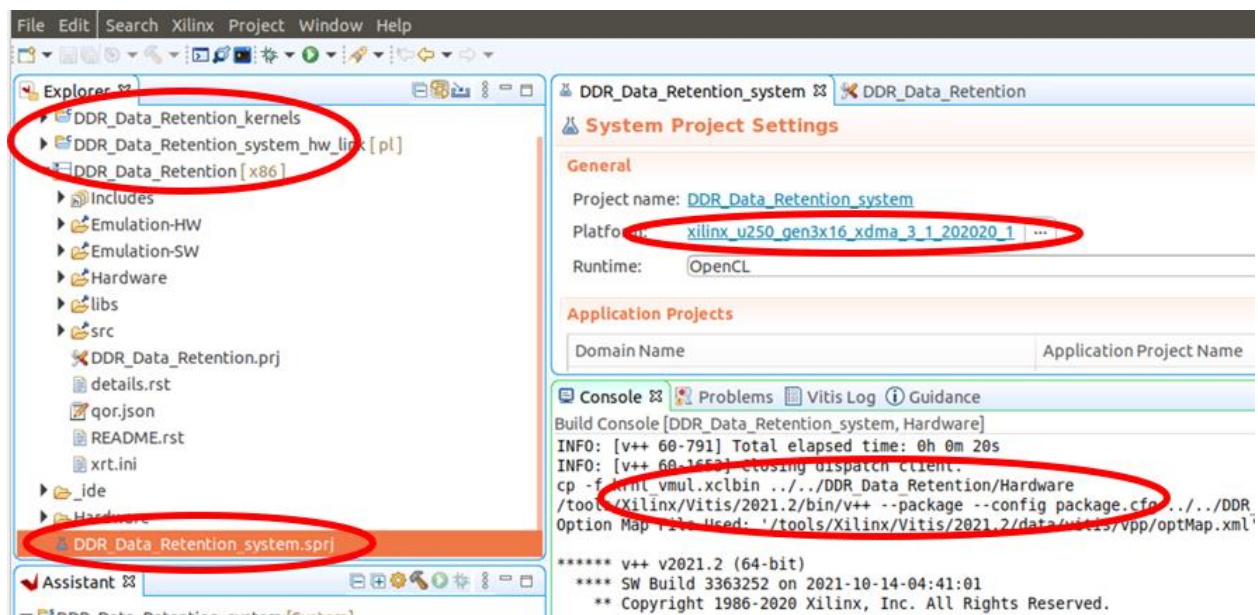
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Hanson/Renaissance Reporting Services 400 Renaissance Center, Suite 2160, Detroit, MI 48243.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.

UNITED STATES DISTRICT COURT

for the
District of Delaware

FG SRC LLC

Plaintiff

v.

Xilinx, Inc.

Defendant

Civil Action No. 1:20-cv-00601-WCB

**SUBPOENA TO PRODUCE DOCUMENTS, INFORMATION, OR OBJECTS
OR TO PERMIT INSPECTION OF PREMISES IN A CIVIL ACTION**To: ZT Group Int'l, Inc. at 12301 Research Boulevard, Building IV, Suite 270, Austin, TX 78759
c/o Business Filings Inc. 701 Brazos Street, Ste 720, Austin, TX 78701*(Name of person to whom this subpoena is directed)*

☒ **Production:** **YOU ARE COMMANDED** to produce at the time, date, and place set forth below the following documents, electronically stored information, or objects, and to permit inspection, copying, testing, or sampling of the material: See attached Exhibit A.

Place: See attached Exhibit A for place.

Date and Time:

04/18/2022 9:00 am

☐ **Inspection of Premises:** **YOU ARE COMMANDED** to permit entry onto the designated premises, land, or other property possessed or controlled by you at the time, date, and location set forth below, so that the requesting party may inspect, measure, survey, photograph, test, or sample the property or any designated object or operation on it.

Place:

Date and Time:

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 03/28/2022

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk

/s/ Paul T. Beeler

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* FG SRC LLC, who issues or requests this subpoena, are:

Paul Beeler, Shore Chan LLP, 901 Main St., Ste. 3300, Dallas, Texas 75202, 214-593-9149, pbeeler@shorechan.com

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:20-cv-00601-WCB

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____
on *(date)* _____.

☐ I served the subpoena by delivering a copy to the named person as follows: _____

_____ on *(date)* _____; or

☐ I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of
\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)**(c) Place of Compliance.**

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
- (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.

(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

- (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

EXHIBIT A

I. DEFINITIONS

1. The terms “ZT Group,” “You,” and “Your” mean and refer to ZT Group Int’l, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of ZT Group Int’l, Inc., whether directly or indirectly, including internal and outside counsel.

2. The terms “Xilinx” and “Defendant” mean and refer to Xilinx, Inc. and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of Xilinx, Inc., whether directly or indirectly, including internal and outside counsel.

3. The terms “FG SRC” and “Plaintiff” mean and refer to FG SRC LLC and all of its predecessors and successors (merged, acquired, or otherwise), partners, investors, corporate parents, affiliated companies and corporations, divisions, departments, direct and indirect subsidiaries, officers, directors, employees, principals, shareholders, agents, attorneys, servants, representatives, and all other persons acting, or purporting to act, on behalf of FG SRC LLC, whether directly or indirectly, including internal and outside counsel.

4. The term “Document(s)” is defined to the broadest extent possible permitted by FEDERAL RULE OF CIVIL PROCEDURE 45 and applicable case law, and is construed to mean, without limitation, any written, printed, typed, stored, photographed, recorded or otherwise reproduced communication, compilation, or reproduction, including computer or electronically generated or

stored information or data, whether allegedly privileged or not. “Document(s)” specifically includes correspondence, including without limitation letters, emails, text messages, direct messages through messaging applications, and all other forms of written communication. “Document(s)” further specifically includes, without limitation, any computer disk, diskette, tape, card, or any other form of computer data storage, electronic data, or electronically stored information, existing or deleted files, metadata, data collected and stored through use of the Internet, including “bookmarks” and browser history identifying Web sites visited, voice-mail messages and identifying information (including information stored on cell phones and hand-held communication devices), digital photographs, charts, and graphs stored electronically, writings, drawings, graphs, chart photographs, sound recordings, images, and all other data or data compilations stored in any medium from which information can be obtained, however produced or reproduced, of any kind of description, whether sent or received, including original copies, non-identical copies, drafts and both sides thereof, regardless of their author or origin, or however denominated by the recipient of the Request. In all instances in which a requested Document, or series of Documents, has been prepared on a periodic basis (such as monthly, quarterly, semiannually, annually, etc.), the Document reflecting each such period is also requested.

5. The term “Lawsuit” means and refers to the case styled as *FG SRC LLC v. Xilinx, Inc.*, currently pending before the United States District Court for the District of Delaware under Civil Action No. 1:20-cv-00601-LPS.

6. The term “Asserted Patent” means and refers to U.S. Patent No. 9,153,311 (the “’311 patent”).

7. The term “FPGA” refers to a Field Programmable Gate Array.

8. The term “Accused Products” means and refers to the products and product lines developed, manufactured, distributed, used, offered for sale, sold, and/or imported into the United States by Xilinx that FG SRC contends in the Lawsuit infringe the Asserted Patent, including without limitation:

- Alveo accelerator cards (including but not limited to the U25, U200, U250, U280, and SN1022 products);
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9. The term “Self-Refresh Functionality” means a self-refresh function or feature whereby a reconfigurable device, such as an FPGA, can be fully or partially reprogrammed or reconfigured without losing dynamic random-access memory (“DRAM”) data or contents. For clarity, this functionality includes, but is not limited to, Xilinx’s description of a self-refresh feature, self-refresh functionality, and/or a save restore feature used in conjunction with self-refresh functionality for any of the Accused Products and any uses or definitions of self-refresh functionality or feature(s) that You employ for Your products and/or services that incorporate any of the Accused Products. For example, Xilinx’s UltraScale architecture-based FPGAs Memory IP core provides a pre-engineered controller and physical layer (PHY) for interfacing UltraScale architecture FPGA user designs to various memory devices:

Self-Refresh

Self-refresh feature is supported for Controller/PHY mode of the Controller and Physical Layer. This feature is not valid for any PHY_ONLY (Physical Layer Only and Physical Layer Ping Pong) designs.

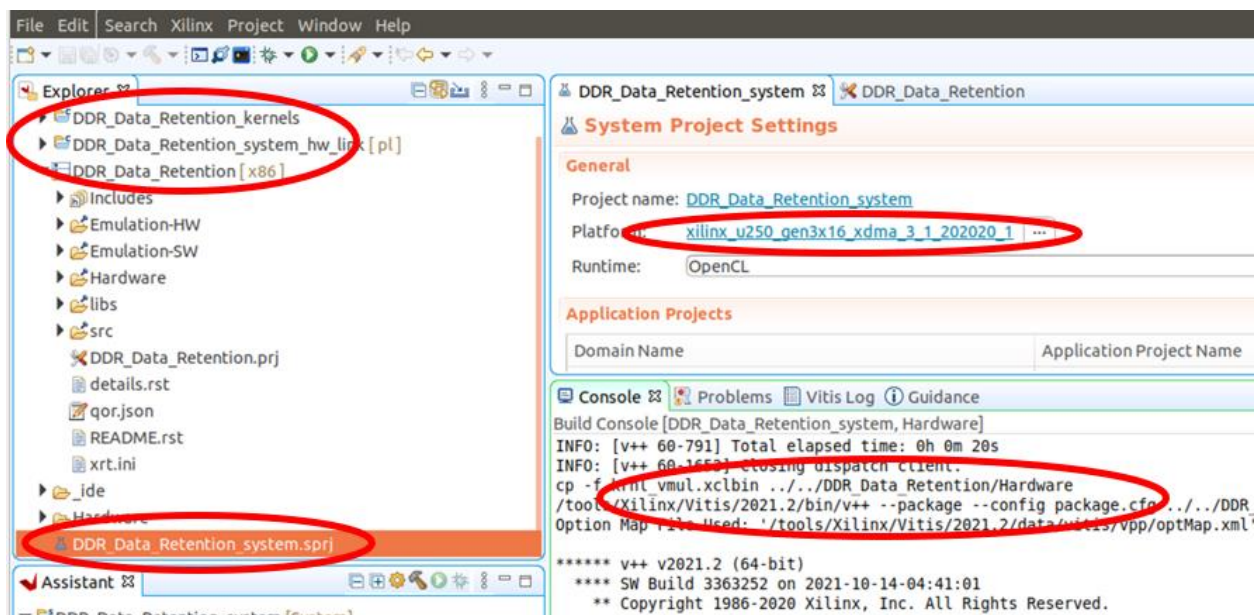
Self-refresh feature keeps the DRAM in self-refresh mode. It also provides a set of XSDB ports at the user interface through which, you can save and restore the memory controller calibration data. This way you can drive the DRAM into self-refresh mode, save the calibration data into an external memory, and reprogram the FPGA or turn it off. It is referred as self-refresh entry cycle.

Xilinx recommends saving the calibration data only once when it is upon the first self-refresh entry and restore the same data for any number of loops requested later. For example, assume the self-refresh entry/exit is requested two times in a system. The calibration data must be saved on the first entry request and the same needs to be restored in the first exit cycle. Upon the second entry request, the calibration data should not be saved and the previously saved data has to be restored in the second exit cycle as well. The same needs to be repeated for any number of loops requested later.

At a later point of time, the same design can be reprogrammed and calibrated in a very quick manner by restoring the saved calibration data and relieving the DRAM from self-refresh mode. It is referred as self-refresh exit cycle. As the DRAM is kept in self-refresh mode, the data is safe and ready for use after reprogramming. The placeholder that keeps

the calibration data inside the Memory Controller while the FPGA is powered is called XSDB block RAM. It is required to save and restore the entire XSDB block RAM. Its end address can be obtained from the END_ADDR0/1 locations of the XSDB debug information. An example to calculate the end address is available in [step 2, page 615](#).

Xilinx UltraScale Architecture-Based FPGA's Memory IP v1.4, PG150, January 21, 2021. The term "Self-Refresh Functionality" further includes DDR Data Retention as part of select Alveo Development Target Platforms as shown in the sample screenshot below:



The term “Self-Refresh Functionality” further includes DDR Data Retention examples, such as those provided by Xilinx at:

- https://github.com/Xilinx/Vitis_Accel_Examples/tree/2021.2/sys_opt/ddr_data_retention; and
- https://xilinx.github.io/Vitis_Accel_Examples/2021.2/html/ddr_data_retention.html.



10. The term “Source Code” means computer code, instructions, scripts, assembly language, source code listings, descriptions thereof, including associated comments and revision histories, and any documentation or explanatory information provided or made available to engineers working therewith. Source Code includes but is not limited to Java, C, C++, Verilog, System Verilog, VHDL, OpenCL, tcl, Python, Bash, configuration scripts, other scripting codes and constraint files, Makefile, or other instructions for an FPGA and/or computer processor (e.g., CPU). The term “Source Code” further includes Block Design files (.bd file extension), Mathworks Simulink project files (.slx or .mdl file extensions), and schematics (.sch file extension).

11. The terms “related to” and “relating to” mean, in whole or in part, directly or indirectly, relating to, referring to, describing, depicting, evidencing, concerning, connected with, commenting on, responding to, showing, supporting, analyzing, reflecting, or constituting. Use of these terms includes any and all related information whether past, present, or relating to the future.

12. The connective terms “and” and “or” are to be construed both disjunctively and conjunctively as necessary in order to bring within the scope of the following requests all information which might otherwise be construed to be outside their scope.

13. The use of the singular form of any word includes the plural and the plural as singular as necessary to bring within the scope of the discovery request any information or Documents which might otherwise be construed to be outside their scope.

14. All undefined terms should be interpreted using common sense and the Federal Rules of Civil Procedure. This means that words should generally be understood to have their ordinary English language meaning as used in common vernacular. If certain terms have specific or specialized meaning in Your industry that make sense in the context of the request, then that specialized meaning should be applied. If the Federal Rules of Civil Procedure provide a specific definition for a term, then that definition is controlling.

II. INSTRUCTIONS

1. The Documents requested herein are to be produced via a secure FTP site, Dropbox, Citrix Sharefile, or similar medium. In the event of electronic production, FG SRC requests that you provide access instructions to Paul Beeler at pbeeler@shorechan.com. In the alternative, the requested materials may be produced to Steckler, Wayne, Cochran, Cherry, PLLC 8416 Old McGregor Road Waco, Texas 76712.

2. If any of the materials requested herein are no longer in your possession, custody, or control, please identify each such requested document by date, type of document, person(s) from whom sent, person(s) to whom sent, person(s) receiving copies, and provide a summary of the pertinent contents.

3. If any material responsive to these requests has been destroyed, please describe the content of such document, the location of any copies of such document, the date of such destruction, the name of the person who ordered or authorized such destruction, and the reason for such destruction.

4. If any material responsive to these requests is objected to on the grounds of confidentiality to a third party, please provide a brief description of the document and the date appearing on that document, and identify the person(s) to whom the duty of confidentiality is owed.

5. If You object to a Request or any portion of any Request on the ground that it calls for information protected by privilege or work product, produce all responsive, non-privileged documents and things for the remainder of the Request, and then provide for each such Request the following information relating to the withheld document or thing: (1) the date of creation; (2) author(s); (3) recipient(s); (4) a description that, without revealing information itself privileged or protected, will enable other parties to assess the claim, and will provide a brief general description of the document along with the basis for the privilege assertion; and (5) the basis on which the discovery is withheld (e.g. attorney-client privilege, work-product doctrine, or both).

6. You are required to supplement your responses to these Requests under Federal Rule of Civil Procedure 26(e) as new information becomes available.

7. FG SRC's counsel seeks to minimize any burden on You. If You have any questions or concerns regarding these requests, you are encouraged to contact the following counsel: Paul Beeler, pbeeler@shorechan.com, (214) 593-9149.

III. DOCUMENTS TO BE PRODUCED

1. Documents sufficient to show, on a quarterly or monthly basis, the total volume of Accused Products purchased by You during the period from October 2015 to present.

2. Documents sufficient to show, on a quarterly or monthly basis, the total amounts paid by You to purchase Accused Products during the period from October 2015 to present.

3. Documents sufficient to show each of Your products and/or services that currently incorporates or implements an Accused Product or that previously did so at any time during the period from October 2015 to present.

4. Documents sufficient to show each of Your products and/or services that currently utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present.

5. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify where such product or service is or was made, used, offered for sale, and/or sold.

6. For each of Your products and/or services that utilizes Self-Refresh Functionality in or with any Accused Product or that previously did so at any time during the period from October 2015 to present, Documents sufficient to identify any code, software, development tools, platforms, or other resources provided by or obtained from Xilinx and utilized, incorporated, or implemented by or in Your product or service, including without limitation Documents sufficient to identify any Xilinx IP cores used for such product or service and what Vivado Design Suite, if any, was used in the development of the product or service.

7. Documents sufficient to show all assistance and/or support provided by Xilinx to You related to the utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services. For clarity, such Documents include, but are not limited to, (1) project descriptions, (2) support tickets, and (3) training and instruction.

8. All Documents exchanged between You and Xilinx related to any utilization of Self-Refresh Functionality in or with any Accused Product by or for any of Your products and/or services.

9. All Documents exchanged between You and any third party, including but not limited to Xilinx, related to FG SRC, the Lawsuit, and/or the '311 patent.